CLAIMS

1. A chemical liquid supply apparatus comprising a nozzle assembly including: a nozzle formed for dispensing a chemical liquid; a primary-side valve assembled for opening/closing a primary-side flow path communicating with a connection port opened to an outside; and a secondary-side valve assembled for opening/closing a secondary-side flow path communicating with the nozzle,

wherein the chemical liquid is sucked into the nozzle assembly from the connection port by expanding a volume of a pump provided between the primary-side valve and the secondary-side valve, and the chemical liquid is dispensed to the outside of the nozzle assembly from the nozzle by shrinking the volume of the pump.

2. The chemical liquid supply apparatus according to claim 1, wherein a double tube includes: an internal tube in which the chemical liquid sucked into the pump flows; and an external tube in which the internal tube is disposed and in which temperature control water for adjusting a temperature of the chemical liquid passing through the internal tube flows, the double tube being connected to the connection port.

3. The chemical liquid supply apparatus according to claim 2, wherein a temperature control flow path, which communicates with the external tube and into which the temperature control water flows, is formed in the pump.

4. The chemical liquid supply apparatus according to claim 3, wherein the pump is formed by a tube-shaped flexible film, one end of the flexible film communicating with the primary-side flow path and the other end thereof communicating with the secondary-side flow path and the pump sucking the chemical liquid by expansion of the flexible film and dispensing the chemical liquid by shrinkage of the flexible film.

5. The chemical liquid supply apparatus according to claim 4, wherein the flexible film is accommodated in a driving room filled with a driving medium, the flexible film being expanded by decreasing a volume or pressure of the driving medium and the flexible film being shrunk by increasing the volume or pressure of the driving medium.

6. The chemical liquid supply apparatus according to claim 5, wherein the nozzle assembly is fixed to a movable arm moving above a workpiece on which the chemical liquid is dispensed.

7. The chemical liquid supply apparatus according to claim 6, wherein a driving device for increasing/decreasing the volume or pressure of the driving medium with which the driving room is filled is located at a portion other than the movable arm, and the driving device and the driving room are connected to each other via a tube in which the driving medium flows.

8. The chemical liquid supply apparatus according to claim 7, wherein the driving medium is an incompressible medium, the flexible film is expanded by decreasing the volume of the incompressible medium in the driving room, and the flexible film is shrunk by increasing the volume of the incompressible medium.